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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,495	06/23/2005	Srivatsan Srinivas Iyer	2003B002/2	4240

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EXAMINER	
KRUER, KEVIN R	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
09/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,495	IYER, SRIVATSAN SRINIVAS	
	Examiner	Art Unit	
	KEVIN R. KRUER	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *August 31 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-20,23-47,49-65,143-146,148-176 and 178-198* is/are pending in the application.

4a) Of the above claim(s) *66-142* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-20,23-47,49-65,143-146,148-176 and 178-198* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/31/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/31/2009 has been entered.

Election/Restrictions

2. Applicant's election without traverse of Group I, claims 1-65 and 143-198 in the reply filed on 6/16/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-10, 12-20, 23-47, 49-665, 143-146, 148-176 and 178-198 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art

that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims have been amended to change the previously claimed “low crystallinity polymer” to a “lower crystallinity polymer” and the claimed “high crystallinity" polymer to “higher crystallinity" polymer. It is not clear from the specification that “low" and “high” are synonymous with "lower" and "higher.” If the terms are not synonymous, then the original disclosure does not support the newly claimed invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-10, 12-20, 23-47, 49-65, 143-146, 148-176 and 178-198 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are directed to a composition comprising a “lower crystallinity polymer” and a “higher crystallinity" polymer. It is not clear from the specification that “low" and “high” are synonymous with "lower" and "higher” are synonymous with the “low” and “high” crystallinity polymers discussed in the specification. If the terms are not synonymous, then it is not clear the claimed invention is supported by the original disclosure. If the terms are synonymous, it is unclear what is meant by “low” and “high” crystallinity. The claims have been amended to clearly state the lower crystallinity polymer has a crystallinity of from 3-40% as determined by DSC. Thus, said term is not indefinite. However, the specification fails to explain what is meant by “high” crystallinity. Paragraph (0022) says the terms are relative, but it is not clear if there are

any further limitations on the high crystallinity polymer. Specifically, paragraph 0069 says it "has a level of crystallinity sufficient to permit yield and plastic deformation during elongation" and paragraph 0070 says the high crystallinity polymers are "defined" by a Markush of possible compositions.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-10, 12-20, 23-47, 49-65, 143-146, 148-176 and 178-198 are rejected 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsurutani et al (US 5,472,792).

Tsurutani teaches an amorphous layer comprising 20-100% amorphous propylene copolymer (herein understood to read on the low crystallinity polymer) and 80-0% of a crystalline polypropylene (herein relied upon to read on the claimed additional polymer). Said additional polymer is understood to have a compatible crystallinity with the amorphous polymer since both have the same crystallizable sequences (see0081). The amorphous polymer may comprise 1-20wt% ethylene (col 3, lines 65+)-which is herein understood to be sufficient to anticipate the claimed 10-20wt% range. Furthermore, the amorphous polymer has a molecular weight (col 3, lines 15+) which overlaps the molecular weight of the claimed low crystallinity polymer (0046). Thus, the amorphous polymer is understood to anticipate the claimed Mooney

viscosity since viscosity is directly proportional to molecular weight. Since said polymer may be made as a byproduct of the crystalline polymer (col 3, lines 31+), it is understood to have the same stereo-regularity. The amorphous polymer has an n-heptane solubility of greater than 40%. Said test is a measure of the crystallinity of a polymer, with higher crystalline materials having a lower n-heptane value. Said test is an alternative to DSC with regards to determining crystallinity and said n-heptane soluble range is understood to be sufficiently specific to anticipate the claimed crystallinity of the lower crystallinity polymer.

The laminate of Tsurutani further comprises a crystalline propylene layer. Said composition may be the same or different than the crystalline polymer used in the amorphous layer (col 5, lines 26+). Specifically, said layer may be a homopolymer or a propylene copolymer containing up to 20wt% of comonomers such as ethylene (col 4, lines 38+). Said layer is understood to be inherently "capable of undergoing plastic deformation upon elongation" since it is compositionally identical to applicant's claimed high crystalline layer. The layer may have isotactic stereo-regularity (col 4, lines 19+). Said polymer is n-heptane insoluble and thus has a crystallinity greater than the amorphous polymer.

Tsurutani does not teach the temperature difference the melting point difference between the two layers should be at least 25C. However, said temperature difference is understood to be inherent to the compositions. Alternatively, it would have been obvious to optimize the difference in temperature. The motivation for doing so would

have been to lower the melting point of the amorphous layer in order to improve its surface adhesivity (col 6, lines 48+).

With regards to claims 7, 25, and 26, an additional layer of high crystalline polymer may be contained in the laminate (col 6, lines 33+). With regards to claim 24, the "additional layer" may comprise a second low crystallinity polymer layer. With regards to claim 27, the laminate comprising B/A/X reads on the claimed invention wherein X is a lower crystalline polymer such as a sealable layer.

With regards to claims 12-15, it would have been obvious to optimize the properties of the low crystallinity polymer by utilizing a metallocene catalyst in order to obtain a uniform composition with the desired low temperature adhesivity.

With regards to claims 29-31, Tsurutani does not teach the claimed haze but teaches the laminate may comprise calcium carbonate, clay and talc (col 5, lines 3+). Said additives are known in the art to increase haze. Thus, it would have been obvious to optimize haze by optimizing the amount of said additive in the laminate.

With regards to claims 32-37, said properties are herein understood to be inherent to the films taught in Tsurutani.

With regards to claim 10, Tsurutani teaches a range of ethylene content that encompasses the claimed range. Thus, said range is understood to be anticipated by Tsurutani since the prior art teaching is sufficiently specific to anticipate the claimed range. Alternatively, it would have been obvious to optimize the ethylene content of the amorphous polymer in order to melting point/softness of the film (col 3, lines 65+).

With regards to 171 and 172, the garment limitations are preamble limitations that are understood not to further limit the claim in any way.

Response to Arguments

Applicant's arguments filed 8/31/2009 have been fully considered but they are not persuasive.

Applicant argues term “high” is relative in comparison to the lower crystallinity polymer and, therefore, the term is not indefinite. Applicant provides no citation to the original disclosure in support of said determination. Applicant also fails to address the examiner's concerns with regards to the disclosure of paragraphs 0069 and 0070 with regards to the proper scope the term “higher crystallinity polymer” should be given. Therefore, the rejection is maintained.

Applicant further argues the specification supports the terms “high” and “low” crystallinity polymers. The examiner agrees but notes the claims are to “higher” and “lower” crystalline polymers and it is not clear from the record said terms are synonymous with “high” and “low." Applicant fails to provide persuasive arguments with regards to whether the terms are synonymous or not.

Applicant further argues they are not required to state which features are "inherent" to high and low crystalline polymers, though they acknowledge the descriptions of high and low crystalline polymers in the specification are the basis for applicant's claims. The examiner apologizes for the poor wording choice, but maintains the position that it is not clear from the specification what features used to describe "low" and "high" crystalline polymers in the specification are understood by applicant to

be incorporated into the claims based upon the “higher” and “lower” crystallinity polymer terminology. Specifically, the examiner has pointed to numerous paragraphs in the specification which describe the “high” and "low” crystalline polymers. The claims are currently indefinite because it is not clear from the original disclosure whether applicant intended said descriptions to limit the claimed invention. For purposes of examination, "lower crystallinity" polymers are understood to be those meeting the claimed DSC measured crystallinity and “higher crystallinity polymers” are understood to be any polymers with higher crystallinity relative to the "lower crystallinity polymer."

Applicant argues the amorphous polymer of the prior art lacks any measurable crystallinity. The examiner respectfully disagrees and points to the disclosure that the amorphous polymer has an n-heptane insoluble fraction. Said fraction is generally understood in the art to represent a crystalline fraction. Thus, the amorphous polymer of the prior art is understood not to be free of crystallinity as argued by applicant.

For the reasons given above, the rejections are maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Kruer/
Primary Examiner, Art Unit 1794